

Shore Protection Manager

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**CARTERET COUNTY BEACH COMMISSION MEETING
OCTOBER 28, 2019; 2:00 pm
PINE KNOLL SHORES TOWN HALL**

AGENDA

(1)	Call to Order.	<i>Chairman Cooper</i>
(2)	Approval of Minutes. (Regular Beach Commission Meeting – September 23, 2019)	<i>Chairman Cooper</i>
(3)	Room Occupancy Tax (ROT) and “Beach Fund” Update.	<i>Greg “rudi” Rudolph</i>
(4)	Post-Dorian (2019) Monitoring Report: Bogue Banks Beach & Nearshore Mapping Program.	<i>Nicole VanderBeke (Moffatt & Nichol)</i>
(5)	Other Business.	
(6)	December 2019 Meeting Date. (December 2, 2019 or TBD)	<i>Chairman Cooper</i>
(7)	Adjourn.	<i>Chairman Cooper</i>

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CARTERET COUNTY BEACH COMMISSION

Agenda Topic Cover Sheet

Approval of Minutes

Regular Beach Commission Meeting – September 23, 2019

Meeting Date: 10/28/19

Topic No. 2

Suggested Action: A motion should be entertained to approve the September 23, 2019 meeting minutes with any recommended changes from the Beach Commission.

Attached for the Beach Commission's review, comments, and subsequent approval are the minutes for the Commission's September 23, 2019 regular meeting.

d:\.../beachcommission/agendas/2019/oct/topicsummary2



CARTERET COUNTY BEACH COMMISSION MEETING

Minutes

Pine Knoll Shores Town Hall

September 23, 2019, 2 pm

Attendance.

Commission Members A.B. "Trace" Cooper (chair), Jim Normile (vice-chair), Harry Archer, Larry Baldwin, Larry Corsello, Joel Fortune, Ken Jones, Woody Warren, secretary Greg Rudolph, and the general public. Members Jimmy Farrington, Douglas Guthrie, and John Wootten were absent.

- (1) **Call to Order.** - Chairman Cooper welcomed fellow Beach Commission members and the audience; and subsequently called the meeting to order.
- (2) **Approval of Minutes – Regular Beach Commission Meeting (July 8, 2019).** – Chairman Cooper asked the Commission if there were any corrections, additions, or comments regarding the July 8th regular session minutes presented in the agenda packet. Member Jones subsequently made a motion to adopt the minutes as presented, which was seconded by member Fortune and unanimously approved.
- (3) **Room Occupancy Tax (ROT) and "Beach Fund" Update.** – Chairman Cooper introduced the topic by noting the June and July occupancy collections were down compared to the same months in 2018, which is not unexpected considering the reduced inventory associated with hurricane *Florence* is prohibiting a similar amount of visitors from staying in the area in summer 2019. Chairman Cooper continued that this was not catastrophic by any means and transitioned over to the Secretary for more detail. Secretary Rudolph noted the May and June occupancy tax collection reports included in the agenda materials signify the conclusion of FY 2018-19, and proceeded to summarize the ROT from this perspective ([slides 1 & 2](#)). The occupancy tax collection was up by +1.5% for FY 2018-19 when compared to the year prior (FY 2017-18), which is impressive considering the damage hurricane *Florence* caused. Rudolph noted the April, May, and June collections swing wildly; and therefore, there may have been some "cross pollination", meaning weekends in one month were reported in another. Regardless, there was a definite decline in the latter months of the fiscal year – the occupancy tax was up by +6.0% at the end of April, but again concluded at +1.5%. Also all the collection sectors (condo/cottage, hotel/motel, and "other") were all in positive territory at the end of April, but only the condo/cottage sector was in the black at the end of June.

The secretary also mentioned the July occupancy tax collection report was included in the agenda and provides a glimpse to the status of the 2019 calendar year. July was down by -12.2%, which has suppressed the calendar year date value to -3.5% (again, it was +6% at the end of April). This for sure is a result of the reduced inventory stemming from hurricane *Florence*, and

hopefully all the damaged structures will be fixed by next summer and we'll see a +12.2% uptick next year when everyone has a place to stay to reach our normal summer full capacity.

And lastly the secretary reviewed our occupancy tax/beach nourishment reserve value concluding FY 2018-19 (beginning of FY 2019-20), which was ~\$10.7 million. We know our July value and if we couple the July value with anticipating the August value (assuming a -14% decrease), then we can expect \$1.4 million to be added to the FY 2018-19 total, and hence the reserve value should be ~\$12 million. This number is important to keep in mind when we discuss the cost schedule for our upcoming Phase II Post-Florence Renourishment Project.

- (4) **Bid Result/Award Discussion: Post-Florence Renourishment Project (Phase II)**. – Chairman Cooper mentioned we had a bid opening scheduled for September 10th, and received two bids however State statutes require three bids to be received and therefore we had to re-advertise. The second bid opening was this past Friday (September 20th) and we were allowed to open however many bids were received at that time. The Commission and municipalities received an email regarding the results of the bid on Friday, but secretary Rudolph will provide more detail today. The secretary subsequently introduced Sam Morrison and Nicole Vanderbeke from Moffatt & Nichol and proceeded to thank them for their work on the bid solicitation package – releasing the bid/plans & specifications well before the dredging window opened was key in securing a favorable bid, and Moffatt & Nichol worked extremely hard to these ends. With respect to the project scope ([slides 3 - 6](#)), Phase I was completed this past spring along the beaches of East Emerald Isle and Indian Beach/Salter Path and Phase II will incorporate West Atlantic Beach, Pine Knoll Shores, the State oceanfront of Salter Path, and a portion of West Emerald Isle. Phase II is just about double the size (geographically and volume wise) as Phase I.

Great Lakes Dredge & Dock is the apparent low bidder at ~\$28.1 million, which includes the bigger line items such as mobilization/demobilization and unit cost, as well dune planting and contingency items such as stand by time and turtle trawling. Our estimate was ~\$31 million so we're very pleased with the outcome, and Great Lakes Dredge & Dock was our contractor for Phase I, and they performed very admirably. For the proposed cost schedule, we used a composite unit cost that incorporates all line items into a single unit cost per cubic yard (cy). That unit cost (\$14.12 per cy) was then multiplied by the total cubic yards proposed to be delivered to each political jurisdiction. The FEMA fixed-cost funding is applied to only the Towns that have received an award notice (Pine Knoll Shores), and the remaining costs are split 50% State via the \$15.3 million awarded earlier in the year and 50% "local". The local of course is split even further 75% nourishment reserve and 25% Town.

Secretary Rudolph continued that as an overall budget number, he would propose using \$14.50 per cubic yard to accommodate any extra turtle trawling days, perhaps more sand in certain areas, etc. This would increase the total budget from \$28.1 to \$28.9 million. Another aspect of the funding includes our forecasting of FEMA fixed cost funds. To this end, once Indian Beach receives the fixed cost funds, they will essentially reimburse the nourishment reserve \$6 million because the reserve provided \$6 million of the total \$7 million associated with the Phase I effort for Indian Beach. Hence the \$6 million added to our reserve balance of \$12 million equals \$18 million. That sum (\$18 million) can more than accommodate the \$11 million of combined local funding for Phase II and the secretary subsequently asked if the Beach Commission would consider making and passing a motion to approve the budget and for the occupancy tax beach nourishment reserve

to provide all non-FEMA, non-State costs to the Towns. This motion was made by member Archer, seconded by member Jones, and unanimously approved. Chairman Cooper subsequently mentioned this was a very good plan and it is not the Beach Commission's job *per se* to sit on the occupancy tax money collected from all the Towns, but rather to use it for its legislatively-mandated purpose = beach nourishment.

Secretary Rudolph turned the floor over to Mr. Morrison to outline the schedule going forward. Subsequent to discussing the contract execution, notice of award, etc., Mr. Morrison disclosed that we spoke to Great Lakes Dredge & Dock earlier today and the first dredge (*Liberty Island*) will likely arrive in the early stages of 2020. Two dredges will ultimately be used for the project that needs to be completed by April 30th (other dredge will be the *Ellis Island*)

Chairman Cooper asked the Commission if there were any additional questions or comments, and with none forthcoming; the secretary introduced Greg Flinn, who is a FAA licensed drone operator. Mr. Flinn was retained to conduct an island wide drone survey after hurricane *Dorian* passed earlier this month and to deliver all the video in addition to producing a 5 to 10 minute "highlight" video with supporting graphics, etc. We have a rough draft of the highlight video today and all the videos will be posted on the Shore Protection Office's [YouTube Channel](#) once complete. Mr. Flinn subsequently started the video and the secretary narrated the footage.

- (5) **2018- 2019 Annual Report: Bogue Banks Beach & Nearshore Mapping Program.** – Chairman Cooper introduced Nicole Vanderbeke from Moffatt & Nichol (M&N) to summarize the results of our annual beach survey, which is utilized to track sand, look at nourishment triggers, and ascertain the overall health of the beach – not just Bogue Banks, but Shackleford Banks, and Bear Island as well. Ms. Vanderbeke continued by starting a presentation ([Slides 7 – 66](#)), which summarized the methodology of the surveying program, an analysis of the key events (nourishment, storms, etc.) that took place over the course of the past year, and the results focusing upon volume changes, shoreline change, and the evolving geomorphology of the oceanfront beach.

Nicole Vanderbeke (M&N) proceeded from this point and highlighted that in essence, we are summarizing the results of three different surveys – one taken in spring 2018, one immediately after hurricane *Florence* (September 2018), and the spring 2019 survey. This timeframe and the surveys capture the impacts of hurricane *Florence* and the impacts of the Phase I Post-*Florence* Renourishment Project. Additionally, we can see what has happened to the beach/offshore in the months after *Florence* as well. It is apparent the sand that was displaced "deep" offshore during *Florence* has not moved back up the beach profile, and in many areas there was even more loss offshore in the subsequent months. This may not coincide with a visual assessment of the dry sand beach, as some sand that was just underwater has moved up slope; but again overall there has been significant losses offshore because of *Florence*, and from a "net" perspective across the entire profile, sand has continued to slide offshore. A similar response was seen along Shackleford Banks and Bear Island. With respect to the inlets (Barden, Beaufort, and Bogue); there really was not much change (i.e., movement or shoaling). Ms. Vanderbeke concluded by discussing the Phase II Renourishment Project scheduled for this upcoming winter, and the fact we have completed a post-*Dorian* survey and the results will help in the final design of the Phase II Project. The results of the *Dorian* survey will be presented the next time the Beach Commission meets.

- (6) **Public Comment.** – None.
- (7) **Other Business.** – None.
- (8) **October 2019 Meeting Date (October 28, 2019).** – It was agreed upon the next Beach Commission meeting would be held on October 28th at 2:00 pm, Pine Knoll Shores Town Hall.
- (9) **Adjourn.** – Chairman Cooper asked for any additional comments and with no additional comments forthcoming, the meeting was adjourned.



CARTERET COUNTY BEACH COMMISSION

Agenda Topic Cover Sheet

Room Occupancy Tax (ROT) and “Beach Fund” Update.

Meeting Date: **10/28/19**

Topic No. **3**

Suggested Action: None.

A copy of Carteret County’s monthly Room Occupancy Tax (ROT) collection report for both July and August 2019 are attached to this month’s “Beach Fund” update constituting the first two reports of the current fiscal year (FY 2019-20). These data are consequently incorporated into four summary tables presented at the end of this coversheet including; **Table 1** - a running summary of ROT collections comparing monthly revenues from FY 2019-20 to FY 2018-19, **Table 2** - a summary of ROT revenue from a Calendar Year perspective (CY 2019 - CY 2012), **Table 3** - a more detailed FY 2019-20 to FY 2018-19 revenue comparison of the collection by sectors (hotel/motel, condo/cottage, and “other”), and **Table 4** - a year-to-date estimate of the Beach Fund.

Collectively, the July/August collection for 2019 was down by less than a percentage point (-0.4%) compared to the same two months in 2018 (\$3,278,949 vs. \$3,290,991) representing a -\$12,042 overall decrease or a -\$6,021 (50% of total) decrease attributed to the nourishment reserve (Table 1). Perhaps more revealing however is the 2019 Calendar Year collection trend – the June 2019 collection was over -14% down compared to the June 2018 collection and was followed by the July collection that was over -12% down compared to the year prior. Thus at the end of July 2019, the occupancy tax collection was down by -3.6% for the Calendar Year. Conversely the August 2019 collection was up by +16.8%, which has flipped the Calendar Year into positive territory and stands at +0.9% as we await the September and other “shoulder season” monthly collection reports.

The impacts from hurricane *Florence* paint a complicated picture moving forward however. For one, we should expect higher receipts for September 2019 considering *Florence* impacted Bogue Banks during this same month in 2018 and there was an immediate dearth of available hotel or cottage rooms because of the widespread wind and rain damage that was a hallmark of this particular hurricane. Thereafter in the winter and early spring months, occupancy rates were uncommonly high for any of the accommodations that were not damaged during *Florence* as the construction workforce and displaced families rented whatever was available at that time. Of course we won’t experience that type of influx in the winter/early spring this year and could see the

collections drop slightly – albeit these months contribute little compared to the high-volume summer tourism season extending from Memorial Day to Labor Day.

And lastly as illustrated in Table 4 below, our estimated value for the “Beach Fund” at the conclusion of August 2019 is approximately \$11.5 million and was generated by taking our opening balance on July 1, 2019, our revenue through August 2019, and our expenditures to date through August 2019 into account. A copy of the expenditure report for the month of August is also attached to this cover sheet for the Commission’s review and is constrained to more to the Shore Protection Office’s administrative functions. Obviously we have also incorporated the financial transactions (invoicing and payments) associated with the remaining costs associated with the Phase I Post-*Florence* Renourishment Project, and the engineering services to date associated with Phase II (e.g., preparation of the plans and specifications, bid solicitation, environmental/permitting, etc.).

**Cumulative Analysis and Monthly Comparison
Room Occupancy Tax (ROT) and the "Beach Fund"
FY 2019-2020 v. 2018-19
Carteret County**

Month	Gross Receipts TDA & Beach		Beach Fund (Monthly)*		Beach Fund (YTD)*		Occ. Tax Total Monthly Difference	Occ. Tax Total YTD Difference
	FY 18-19	FY 19-20	FY 18-19	FY 19-20	FY 18-19	FY 19-20		
Jul	\$1,951,256	\$1,713,896	\$975,628	\$856,948	\$975,628	\$856,948	-12.16%	-12.16%
Aug	\$1,339,735	\$1,565,053	\$669,867	\$782,526	\$1,645,495	\$1,639,475	16.82%	-0.37%
Sep	\$720,343		\$360,172		\$2,005,667			
Oct	\$304,571		\$152,286		\$2,157,953			
Nov	\$380,894		\$190,447		\$2,348,400			
Dec	\$150,872		\$75,436		\$2,423,836			
Jan	\$166,761		\$83,380		\$2,507,216			
Feb	\$153,978		\$76,989		\$2,584,205			
Mar	\$241,029		\$120,514		\$2,704,719			
Apr	\$367,884		\$183,942		\$2,888,661			
May	\$558,112		\$279,056		\$3,167,717			
Jun	\$1,353,693		\$676,846		\$3,844,564			
Totals=	\$7,689,127	\$3,278,949	\$3,844,564	\$1,639,475	\$3,844,564	\$1,639,475	Avg. = 2.33%	-0.37%

Note: 6% overall collection rate (* = 50 TDA/50 Beach Fund split).

TABLE 1 – Monthly and cumulative summary of the Carteret County room occupancy tax collection reflecting the current and previous fiscal year in terms of the gross revenue and the portion of revenue legislatively mandated for beach nourishment (i.e., the "Beach Fund").

**Cumulative Analysis and Monthly Comparison
Room Occupancy Tax (ROT) and the "Beach Fund"
Calendar Year 2019 - 2012
Carteret County (6% collection rate)**

Month	2019	2018	2017	2016	2015	2014	2013		2012	
	6%	6%	6%	6%	6%	6%	6%	5%	6%	5%
Jan.	\$166,761	\$108,736	\$90,369	\$72,738	\$65,107	\$54,359	\$48,955	\$40,796	\$50,517	\$42,097
Feb.	\$153,978	\$147,363	\$102,895	\$80,744	\$66,976	\$60,118	\$52,897	\$44,081	\$62,634	\$52,195
Mar.	\$241,029	\$194,638	\$198,697	\$197,020	\$142,289	\$121,346	\$128,088	\$106,740	\$114,521	\$95,434
Apr.	\$367,884	\$426,106	\$378,586	\$267,064	\$238,039	\$218,570	\$187,767	\$156,472	\$226,302	\$188,585
May	\$558,112	\$314,986	\$574,112	\$495,403	\$519,427	\$530,041	\$373,921	\$311,601	\$368,024	\$306,687
June	\$1,353,693	\$1,582,294	\$1,211,103	\$1,254,762	\$1,194,984	\$1,119,788	\$1,126,150	\$938,458	\$1,041,735	\$868,113
July	\$1,713,896	\$1,951,256	\$2,022,661	\$1,945,706	\$1,799,562	\$1,714,309	\$1,440,439	\$1,200,365	\$1,436,356	\$1,196,963
Aug.	\$1,565,053	\$1,339,735	\$1,345,057	\$1,310,899	\$1,310,391	\$1,327,500	\$1,270,274	\$1,058,562	\$1,140,977	\$950,814
Sept.		\$720,343	\$651,908	\$632,513	\$598,281	\$514,648	\$471,580	\$392,983	\$437,265	\$364,387
Oct.		\$304,571	\$424,176	\$354,178	\$357,967	\$348,348	\$296,997	\$247,497	\$219,665	\$183,054
Nov.		\$380,894	\$260,361	\$192,591	\$148,172	\$125,217	\$145,665	\$121,388	\$120,973	\$100,811
Dec.		\$150,872	\$97,436	\$98,029	\$89,584	\$92,698	\$72,597	\$60,498	\$51,216	\$42,680
Totals =	\$6,120,405	\$7,621,795	\$7,357,361	\$6,901,648	\$6,530,780	\$6,226,944	\$5,615,329	\$4,679,441	\$5,270,185	\$4,391,821
YTD =	0.91%									
(+/-) previous year		3.59%	6.60%	5.68%	4.88%	10.89%	6.55%		-1.39%	

TABLE 2 – Monthly and cumulative summary of the Carteret County Room Occupancy Tax collection reflecting the current and previous seven calendar years in terms of the gross revenue only.

HOTELS/MOTELS

Month	2018-19		2019-20		FY 2019-20 v. 2018-19	
	Monthly	Year-to-Date	Monthly	Year-to-Date	Monthly	Year-to-Date
Jul	\$365,114	\$365,114	\$311,918	\$311,918	-\$53,196	-14.57%
Aug	\$217,643	\$582,757	\$252,144	\$564,062	\$34,502	-3.21%
Sep	\$236,742	\$819,499				
Oct	\$147,923	\$967,422				
Nov	\$129,778	\$1,097,200				
Dec	\$92,243	\$1,189,443				
Jan	\$86,242	\$1,275,685				
Feb	\$83,762	\$1,359,447				
Mar	\$121,653	\$1,481,100				
Apr	\$156,419	\$1,637,519				
May	\$202,368	\$1,839,887				
Jun	\$271,570	\$2,111,457				
Totals=	\$2,111,457	\$2,111,457	\$564,062	\$564,062	-\$18,695	-3.21%

CONDOS/COTTAGES

Month	2018-19		2019-20		FY 2019-20 v. 2018-19	
	Monthly	Year-to-Date	Monthly	Year-to-Date	Monthly	Year-to-Date
Jul	\$1,462,838	\$1,462,838	\$1,291,633	\$1,291,633	-\$171,206	-11.70%
Aug	\$1,046,472	\$2,509,310	\$1,245,633	\$2,537,266	\$199,161	1.11%
Sep	\$446,022	\$2,955,332				
Oct	\$118,172	\$3,073,504				
Nov	\$225,997	\$3,299,501				
Dec	\$38,797	\$3,338,298				
Jan	\$42,818	\$3,381,116				
Feb	\$25,854	\$3,406,970				
Mar	\$66,460	\$3,473,431				
Apr	\$154,609	\$3,628,039				
May	\$283,506	\$3,911,545				
Jun	\$1,044,576	\$4,956,121				
Totals=	\$4,956,121	\$4,956,121	\$2,537,266	\$2,537,266	\$27,955	1.11%

OTHER, LESS THAN 5, & ON-LINE TOTAL

Month	2018-19		2019-20		FY 2019-20 v. 2018-19	
	Monthly	Year-to-Date	Monthly	Year-to-Date	Monthly	Year-to-Date
Jul	\$123,303	\$123,303	\$110,346	\$110,346	-\$12,958	-10.51%
Aug	\$75,620	\$198,923	\$67,276	\$177,621	-\$8,345	-10.71%
Sep	\$37,579	\$236,503				
Oct	\$38,477	\$274,980				
Nov	\$25,120	\$300,099				
Dec	\$19,832	\$319,931				
Jan	\$37,701	\$357,632				
Feb	\$44,361	\$401,993				
Mar	\$52,915	\$454,908				
Apr	\$56,856	\$511,764				
May	\$72,238	\$584,002				
Jun	\$37,547	\$621,549				
Totals=	\$621,549	\$621,549	\$177,621	\$177,621	-\$21,302	-10.71%

TABLE 3 – Monthly and cumulative summary of the Carteret County occupancy tax collection segregated by each of the three collection sectors (hotel/motel, condo/cottage, and “other”) for the current and previous fiscal years in terms of the gross revenue only. Note: On-line collection was first implemented in January 2016.

**Estimated Year-to-Date "Beach Fund" Reserve Balance
FY 2019-20**

Opening Fund Balance (7/1/19)	\$10,679,909
Revenues	
Occupancy Tax (to date)	\$1,639,475
Coastal Storm Damage Mitigation Fund (S.L. 2018-134 & 138)	\$0
Interest on Reserve	NA
Total Revenues	<u>\$1,639,475</u>
Expenditures	
Shore Protection Office (8/31/19)	\$26,236
Post Florence Renourishment Project - Phase I & II	\$788,837
County Occupancy Tax Administration Fee*	<u>\$21,395</u>
Total Expenditures	<u>\$836,468</u>
 (Deficit)/Surplus for Year	 <u>\$803,007</u>
 Fund Balance	 <u><u>\$11,482,916</u></u>

*Up to 3% of first \$500,000 of gross proceeds and 1% of remaining gross receipts collected each year.

TABLE 4 – Estimated value of the “Beach Fund” utilizing the opening fund balance at the beginning of the current fiscal year, coupled with the revenues and expenditures to date.

OCCUPANCY TAX COLLECTION

Reporting period:

Jul-19

Type	Tax Received	Penalties & Interest	Total Reporting Tax	Total No Tax
CONDOS/COTTAGE	\$ 1,291,423.43	\$ 209.07	129	39
HOTEL / MOTEL	\$ 310,623.18	\$ 1,295.03	28	7
OTHER	\$ 37,560.32	\$ 274.84	62	51
ONLINE	\$ 72,510.42	\$ -	5	1
TOAL ALL TYPES	\$ 1,712,117.35	\$ 1,778.94	224	98
Total Collected	\$ 1,713,896.29			

July-19

Reporting Location	Condos/Cottage Tax	Hotel/Motel Tax	Other Tax	On Line	Total
Atlantic Beach	\$141,011.19	\$61,283.21	\$5,196.23	\$0.00	\$207,490.63
Beaufort	\$8,315.16	\$39,089.72	\$9,618.38	\$0.00	\$57,023.26
Cape Carteret	\$431.17	\$17,408.28	\$0.00	\$0.00	\$17,839.45
Emerald Isle	\$1,111,312.45	\$41,752.27	\$17,364.49	\$0.00	\$1,170,429.21
PKS / Salter Path/ Indian Beach	\$13,057.23	\$91,686.16	\$2,115.75	\$0.00	\$106,859.14
Morehead City	\$272.16	\$49,268.82	\$886.89	\$0.00	\$50,427.87
On Line	\$0.00	\$0.00	\$0.00	\$72,510.42	\$72,510.42
Unincorporated	\$17,233.14	\$11,429.75	\$2,653.42	\$0.00	\$31,316.31
Totals	\$1,291,632.50	\$311,918.21	\$37,835.16	\$72,510.42	\$1,713,896.29

OCCUPANCY TAX COLLECTION**Reporting period:****Aug-19**

Type	Tax Received	Penalties & Interest	Total Reporting Tax	Total No Tax
CONDOS/COTTAGE	\$ 1,245,366.83	\$ 266.26	106	70
HOTEL / MOTEL	\$ 251,474.46	\$ 669.77	21	14
OTHER	\$ 35,899.23	\$ 95.03	44	77
ONLINE	\$ 31,281.40	-	5	1
TOAL ALL TYPES	\$ 1,564,021.92	\$ 1,031.06	176	162
Total Collected	\$ 1,565,052.98			

August-19

Reporting Location	Condos/Cottage Tax	Hotel/Motel Tax	Other Tax	On Line	Total
Atlantic Beach	\$113,147.08	\$48,858.72	\$8,134.19	\$0.00	\$170,139.99
Beaufort	\$4,940.19	\$28,232.58	\$6,156.57	\$0.00	\$39,329.34
Cape Carteret	\$293.47	\$13,498.69	\$0.00	\$0.00	\$13,792.16
Emerald Isle	\$1,097,021.35	\$29,534.19	\$17,429.53	\$0.00	\$1,143,985.07
PKS / Salter Path/ Indian Beach	\$12,703.02	\$79,279.87	\$1,589.70	\$0.00	\$93,572.59
Morehead City	\$493.36	\$44,560.25	\$896.81	\$0.00	\$45,950.42
On Line	\$0.00	\$0.00	\$0.00	\$31,281.40	\$31,281.40
Unincorporated	\$17,034.62	\$8,179.93	\$1,787.46	\$0.00	\$27,002.01
Totals	\$1,245,633.09	\$252,144.23	\$35,994.26	\$31,281.40	\$1,565,052.98

ACS FINANCIAL SYSTEM
10/21/2019 9:12:21
LEVEL OF DETAIL 1.0 THRU 4.0

Expenditure Guideline
FOR THE PERIOD(S) JUL 01, 2019 THROUGH AUG 31, 2019

CARTERET COUNTY, NC
GL520R-V08.13 PAGE 1

*** USER MAY NOT HAVE ACCESS ***	ANNUAL	ACT MTD POSTED	ACT YTD POSTED	REMAINING	
*** TO ALL ACCOUNTS IN RANGE ***	AMENDED BUDGET	ENCUMBERED	AND IN PROCESS	AND IN PROCESS	BALANCE PCT
110 GENERAL FUND					
40 ECONOMIC & PHYSICAL DEVELOP					
4901 BEACH NOURISHMENT					
12100 SALARIES	108,840.00	0.00	8,208.00	14,364.00	94,476.00 13 -
12600 PART TIME WAGES	0.00	0.00	0.00	0.00	0.00 0
18100 FICA EXPENSE	8,330.00	0.00	605.80	1,060.15	7,269.85 12 -
18200 RETIREMENT CONTRIBUTION	9,850.00	0.00	741.18	1,297.06	8,552.94 13 -
18300 HOSPITALIZATION INSURANCE	9,515.00	0.00	622.09	1,281.78	8,233.22 13 -
18500 UNEMPLOYMENT	0.00	0.00	0.00	0.00	0.00 0
18600 WORKMENS COMP	2,000.00	0.00	0.00	1,911.00	89.00 95 -----
18700 401 K PLAN	5,445.00	0.00	410.40	718.20	4,726.80 13 -
20000 SUPPLIES	2,000.00	0.00	0.00	0.00	2,000.00 0
28000 SMALL EQUIPMENT	2,000.00	0.00	0.00	0.00	2,000.00 0
31400 TRAVEL IN-COUNTY	2,400.00	0.00	63.22	63.22	2,336.78 2
32100 TELEPHONE & DATA SERVICES	3,660.00	0.00	282.94	282.94	3,377.06 7
32500 POSTAGE	1,000.00	0.00	15.95	15.95	984.05 1
39500 TRAVEL	5,880.00	0.00	0.00	0.00	5,880.00 0
44000 CONTRACTED SERVICES	385,470.00	0.00	975.00	975.00	384,495.00 0
44100 FEASIBILITY AGREEMENT	0.00	0.00	0.00	0.00	0.00 0
44200 SECTION 933 REIMBURSEMENT	0.00	0.00	0.00	0.00	0.00 0
49100 DUES AND SUBSCRIPTIONS	5,000.00	0.00	584.00	4,267.00	733.00 85 -----
69900 GRANT CONTRIBUTIONS EDC	0.00	0.00	0.00	0.00	0.00 0
TOTAL: BEACH NOURISHMENT	551,390.00	0.00	12,508.58	26,236.30	525,153.70 4
TOTAL: ECONOMIC & PHYSICAL DEVELOP	551,390.00	0.00	12,508.58	26,236.30	525,153.70 4
TOTAL: GENERAL FUND	551,390.00	0.00	12,508.58	26,236.30	525,153.70 4



CARTERET COUNTY BEACH COMMISSION

Agenda Topic Cover Sheet

Post-Dorian (2019) Monitoring Report: Bogue Banks Beach & Nearshore Mapping Program.

Meeting Date: **10/28/19**

Topic No. **4**

Suggested Action: None.

Nicole VanderBeke with the engineering firm of Moffatt & Nichol (M&N) will again be providing a PowerPoint presentation to the Beach Commission at our October meeting – this time highlighting the key results and main conclusions regarding our *Post-Dorian* survey, conducted days subsequent to the hurricane's passage south of Bogue Banks on September 6, 2019. Of course this is on the heels of a presentation the Beach Commission received last month regarding our annual comprehensive survey of not just Bogue Banks, but Shackleford Banks and Bear Island as well ([Slides 7 – 66](#)). Our annual survey presentation compared the Spring 2018 survey, the *Post-Florence* survey (September 2018), and the Spring 2019 survey. The Commission may remember we obviously experienced a significant loss of sand as a result of hurricane *Florence*, and for the most part continued observing some additional loss of sand "down the beach profile" beyond the depths of -12 and -20 feet NAVD 88 in the interim between the 2018 *Florence* and Spring 2019 surveys. The magnitude of loss associated with *Florence* generally averaged -20 to -30 cubic yards a linear foot (cy/ft) for almost all the reaches we have established along Bogue Banks, and some reaches even eclipsed -40 cy/ft. The losses subsequent to *Florence* to Spring 2019 were in the single digits (i.e., <-10 cy/ft and mostly <-5 cy/ft). The Spring 2019 survey also captured the impacts of the [Phase I](#) *Post Florence* Nourishment project that placed 975,647 cy of sand along 5.2 miles of beach in East Emerald Isle and Indian Beach/Salter Path during March and April of 2019 (35.8 cy/ft fill density).

For our *Post-Dorian* survey presentation, we will focus on volume and shoreline changes comparing the Annual Spring 2019 (May) and *Post-Dorian* (*September 2019*) surveys. *Dorian* had a similar west-to-east "windshield wiper" track across the Onslow Embayment in terms of position, forward speed, and even intensity as that of hurricane *Matthew* in 2016; and the Commission may remember sand moved consistently **up** the beach profile as result of *Matthew*. Bogue Banks gained an average of over +3 cy/ft above the -12 feet NAVD 88 cutoff lens during *Matthew* and we were interested if *Dorian* would

yield a similar response – and to this effect; we also experienced a volume gain above -12 feet NAVD 88 compliments of *Dorian* (see Table 1) although the average gain was just below +3 cy/ft and the “sand moving up the profile” trend was not as consistent on a transect-by-transect basis as that of *Matthew*. Another noticeable and yet more prominent difference between the two hurricanes was with respect to shoreline change (demarcated as the Mean High Water line established at +1.5 feet NAVD 88) – the shoreline advanced seaward roughly +5 feet during *Matthew* compared to +18 feet seaward during *Dorian*. These data are consistent to many visual observations that were shared after *Dorian* passed to the impression that “we gained sand” at the base of the dune and the beach berm looked wider.

Reach	Profiles	Linear Feet	Average Shoreline Change (May 2019 - September 2019)	Average Volume Change (May 2019 - September 2019)
Bogue Inlet - Ocean	1 - 11	11,488	+4 feet seaward (+)	-1 cubic yard / linear foot
Emerald Isle - West	12 - 25	18,288	+11 feet seaward (+)	+2 cubic yard / linear foot
Emerald Isle - Central	26 - 36	15,802	+31 feet seaward (+)	+10 cubic yard / linear foot
Emerald Isle - East	37 - 48	13,220	+15 feet seaward (+)	-4 cubic yards / linear foot
Indian Beach/Salter Path	49 - 58	12,850	+14 feet seaward (+)	-0 cubic yards / linear foot
Pine Knoll Shores	59 - 76	23,878	+20 feet seaward (+)	+6 cubic yards / linear foot
Atlantic Beach	77 - 102	26,176	+26 feet seaward (+)	+4 cubic yards / linear foot
Ft. Macon State Park	103 - 112	6,691	-2 feet landward (-)	-1 cubic yards / linear foot
Totals or Average =	112	128,393	+18 feet seaward (+)	+3 cubic yards / linear foot

Table 1 – Average shoreline and volume change from May 2019 (annual survey) to September 2019 (post-*Dorian* survey) for eight oceanfront reaches positioned along Bogue Banks. Reported volume changes are calculated relative to above the -12 feet NAVD 88 contour.

As also depicted in Figure 1 (next page), a clear trend emerges once the volumetric data is compared over the past few years and surveying events; (1) loss of a significant amount of sand during *Florence*, (2) a slight loss of sand below -12 feet NAVD 88 thereafter when the 2019 annual survey was conducted (*sans* the Phase I nourishment area), and (3) a slight gain in most of our management reaches after *Dorian*. The volume and shoreline data, and profile plots have been provided to us at the time this agenda memorandum is being prepared and Ms. Vanderbeke will provide additional insights at our regular October meeting that will ultimately be culminated into a final report that we will make available on-line at <http://www.carteretcountync.gov/329/Monitoring>.

Average Profile Volume by Bogue Banks Reach

(foredune to -12 NAVD 88)

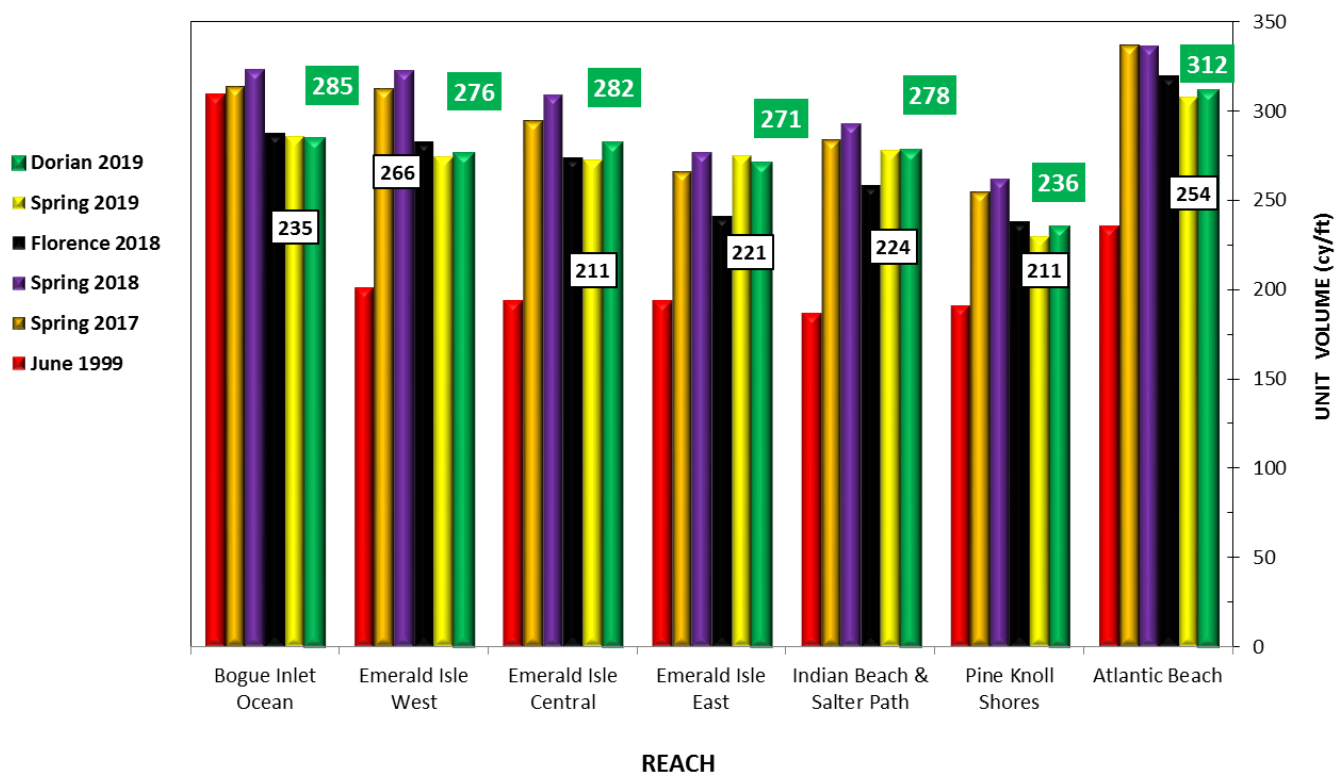


Figure 2 – Average profile volumes for September 1999 (baseline year), *Dorian* (2019 - the most recent survey), 2019, *Florence* (2018), 2018, and 2017 for seven oceanfront management reaches along Bogue Banks. The minimum volumetric thresholds (i.e., nourishment triggers) are provided in the white call-out boxes while the Post-*Dorian* (2019) average volume is represented in the green call-out boxes. For most of the reaches, there is a clear trend of; (1) losing a significant amount of sand during *Florence*, (2) a slight loss of sand below the -12 feet NAVD 88 elevation thereafter when the 2019 annual survey was conducted, and (3) a slight gain of sand attributable to *Dorian*. The impacts of the Phase I Post-*Florence* Beach Nourishment Project can also clearly be noticed during the Post-*Florence* (2018) to Spring 2019 timeframe in the Emerald Isle East and Indian Beach & Salter Path reaches (i.e., - the “black” and “yellow” bars, respectively).

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